

## REMARKS

Claims 23-42 are in this case as filed. Claim 23 has been amended as detailed below. The dependencies of claims 32 and 33 have been corrected so that these multiply dependent claims no longer dependent from multiply dependent claim 31. The dependency of claim 39 has also been amended to recite that the claim depends from a number of claims, including claim 38. The amendments to claim dependencies are supported in the original claims of the PCT application. Claim 39 corresponds to original claim 17 which referred to a primer casing as claimed in any of claims 1-16. Claim 39 is rewritten to remove improper dependency from multiply dependent claims. Claims 32 and 33 correspond to original claims 10 and 11 which originally depended from all of claims 6 to 9. The dependencies of claims 32 and 33 have been amended to delete reference to multiply dependent claim 31. Claims 23-42 are in this case.

Claim 23 has been amended to clarify that the sleeve portion and leading portion of the primer casing are integral components of a unitary piece. Thus, the sleeve and leading portions are not provided as individual, separable components of the primer casing. Basis for this amendment can be found at page 4, lines 31-32 of the specification. It is also a feature of the claim that the leading portion comprises a nose cone which is provided at one end and as an extension of the sleeve portion. It follows that the nose cone is an integral part of the primer casing rather than a separate attachment.

Claim 23 is also being amended to specify that the blasthole engagement means is an integral part of the sleeve portion. Basis for this amendment comes from page 4, lines 30-31 of the specification. It will be appreciated by this amendment that the blasthole engagement means forms part of the primer casing itself rather than being provided as a separate and attachable component.

As well as being supported by the description of the present invention, it will be appreciated that the revised definition of the primer casing according to claim 23 is consistent with the embodiment depicted in the figures accompanying the present application. The casing depicted in the figures is of one-piece construction comprising the various features defined in claim 23 as integral elements. With reference to Figures 1 and 2, it will be noted that the primer casing (1) includes a nose cone (8) as an integral feature. It will also be noted

that the blasthole engagement means (2), which is in a form of projecting legs, extend as integral members of the casing (1). As disclosed in the present specification, the kind of one-piece component defined in claim 23, and illustrated in the Figures, may be made by injection molding a plastics material using a single mold (see page 5, lines 1-2).

The Examiner has rejected claims 23-35, 37 and 39-42 under 35 U.S.C. 103(a) as being unpatentable over McLaughlin in view of Roush. Reconsideration and withdrawal of this rejection are respectfully requested.

Roush discloses explosive cartridges which are adapted to be connected end-to-end in series in order to form an explosive train. A cartridge is illustrated in Figure 1 and described at column 2, line 46 to column 3, line 10. Figure 3 illustrates a number of cartridges (11) joined in series (see also column 4, lines 3-6). Roush also discloses a primer case which is adapted to be connectable between adjacent cartridges or to the leading end of a train of such cartridges. The case is illustrated in Figure 2 and described in detail at column 3, line 11 to column 4, line 2. Figure 3 illustrates a primer case (33) attached end-to-end between two explosive cartridges (11) of the type shown in Figure 1 (see column 4, lines 3-8). It is evident from Figure 2 that the primer case may include an anchor means (62) and a nose cone (70). However, it is immediately apparent from the illustration in Figure 2 that these elements are provided as separate components which are adapted to be attached to the end of the primer case. Figure 5 illustrates a combination nose cone and anchor means (column 4, lines 4-26) but this is nevertheless a separate component which is adapted to be attached to the end of the primer case.

There is no disclosure or suggestion in Roush of providing the primer case with integral nose cone and anchor components rather than separate, attachable components. Indeed, this would be completely inconsistent with the approach taught in Roush for constructing an explosive train comprising a series of explosive cartridges and primer cases: the leading end of the primer case must be adapted to be connected to the trailing end of an adjacent cartridge. This would not be possible if the leading end of the primer case was provided with an integral nose cone. The design of the primer case in Roush is specifically intended to allow the nose cone and anchor to be attached as and when necessary, and to this end it is believed that one skilled in the art would appreciate that the provision of a primer case with integral nose cone and anchor components is contrary to the approach adopted in Roush.

McLaughlin discloses a centering device which may be fitted to a separate primer. This is clearly illustrated in Figure 1 and explained at column 2, lines 38-52. Essentially, the centering device in Figure 1 comprises a circular ring (11) with fingers or spikes (13) located around the ring. The inside diameter of the ring is sized appropriate to fit over the exterior of a primer casing. It will be appreciated that the disclosure of McLaughlin relates to a separate centering element which is intended to be attached to a primer casing.

It is submitted that the combination of McLaughlin and Roush would not lead one skilled in the art to provide a primer casing as claimed in the present application. McLaughlin may teach one skilled in the art to fit an anchor or centering device in a manner different from that taught in Roush, i.e., over the case in Roush as opposed to threaded onto an appropriate end section of the case. However, this would still not lead to the kind of primer casing as claimed in the present application in which the blasthole engagement means and nose cone are integral components of the casing itself. In the present invention, the nose cone and blasthole engagement means are not provided as separate components which are adapted to be attached to the casing prior to use. The present invention, as defined in amended claim 23 is believed to represent a simple yet elegant design which combines all features required for inserting and retaining a primer in a blasthole. Moreover, the primer casing of the present invention may be prepared by injection molding (of a plastics material) using a single mold and in this respect offers a convenient and very cheap alternative to the type of casings disclosed in the prior art.


In the circumstances, it is believed that the primer casing defined by amended claim 23 is not obvious over the combination of McLaughlin in view of Roush. It follows from this that claims 24-35, 37 and 39-42 are also nonobvious over McLaughlin in view of Roush.

Claims 36 and 38 are objected to as being dependent upon a rejected base claim. These claims are said to be allowable if written in independent form. It is believed that amended claim 23 from which both of these claims depend is allowable, and that this objection should be withdrawn.

Conclusion

This application being in condition for allowance passage to issuance is respectfully requested. This response is accompanied by a Petition for Extension of Time of one month with requisite fee as a large entity. No additional fees are believed to be required. If this is not correct, please deduct any required fees or credit any overpayment of deposit account 07/1969.

Respectfully submitted,

  
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